



## LISTING OF CLAIMS

1-60 (Cancelled)

61. (New) A method of providing selective biological samples from a sample archive; said method comprising:

providing a sample repository comprising a plurality of samples derived from biological sources, said samples stored in substantially desiccated form at known location within said repository;

providing an information database comprising medical history, clinical or phenotypic information associated with said biological sources corresponding to said plurality of samples;

determining a request for a sample selected from said plurality of samples in said repository;

removing at least a portion of said sample based upon said request.

62. (New) The method of Claim 61 wherein said request is received by a Service Provider from a remote requestor located remotely from said repository.

63. (New) The method of Claim 61 further comprising supplying said samples with unique identifiers.

64. (New) The method of Claim 61 wherein said samples in said repository are associated with optically readable identifiers.

65. (New) The method of Claim 61 further comprising organizing a plurality of said removed at least sample portions into an ordered assembly.
66. (New) The method of Claim 62 wherein a catalog of said samples and said associated database is made available to said remote requestor via a computer network.
67. (New) The method of Claim 62 wherein said Service Provider accesses a plurality of sample repositories in a corresponding plurality of locations.
68. (New) The method of Claim 67 wherein said information database comprises an integrated database comprising individual databases corresponding to said plurality of repositories, said integrated database accessible to said Service Provider and to said remote requestor.
69. (New) The method of Claim 62 wherein said request is received via computer network communication means.
70. (New) The method of Claim 61 wherein said removal comprises mechanical means to separate said at least portion from other sample portions in said repository having like sample composition.

71. (New) The method of Claim 61 further comprising optically detecting the location for said removal of said at least sample portion.

72. (New) A method comprising:

providing a repository capable of storing a plurality of samples derived from biological sources in substantially desiccated form at known locations, said samples being stored in separable portion format, each portion having been derived from the same biological source and having substantially identical composition and stored in close proximity in said repository;

identifying a sample from information associated with said sample in an information database comprising medical, clinical or phenotype information,

responsive to said identifying, ascertaining a location of said identified sample in said repository;

responsive to said ascertaining, removing at least a separable portion of said sample.

73. (New) The method of Claim 72 wherein said sample comprises a polynucleotide.

74. (New) The method of Claim 72 wherein said sample comprises a protein.

75. (New) The method of Claim 73 wherein said removed at least portions of said sample are at least partially amplified prior to further analysis.
76. (New) The method of Claim 75 wherein said analysis comprises contacting said sample portion with other matter and detecting a specific binding event resulting from said contacting.
77. (New) The method of Claim 72 further comprising repeating said identifying, ascertaining, and removing steps for a plurality of samples in said repository and forming an ordered assembly of said sample portions for analysis.
78. (New) A method of obtaining a repository sample for analysis; said method comprising:
- receiving a request for a sample, which request was determined from accessing an information database comprising medical history, clinical or phenotypic information corresponding to the source of said sample;
  - identifying a sample stored in substantially desiccated form stored in a repository;
  - responsive to said receiving and said identifying, locating said sample in said repository;
  - detecting a location to remove at least a portion of said sample from other portions of said sample located proximate thereto;
  - removing at least a portion of said sample.

79. (New) The method of Claim 78 wherein said detecting is performed with optical image recognition means.

80. (New) The method of Claim 78 wherein said sample is identified among a collection of samples located in a plurality of separately located repository installations.